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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,824	02/06/2002	Charles E. Romano JR.	83245LMB	8825

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EXAMINER

SCHWARTZ, PAMELA R

ART UNIT PAPER NUMBER

1774

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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ML

Office Action Summary	Application No. 10/068,824	Applicant(s) ROMANO, CHARLES E.	
	Examiner Pamela R. Schwartz	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 23-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22, 37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-38 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

1. Applicant is advised that should claim 2 be found allowable, claim 37 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 38 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. With respect to claim 38, the examiner was unable to find support in the original claims or specification for the limitation that the vinyl latex polymer be anionic. Applicants have pointed to several claims and places within the specification, including the examples. There is one example that includes a vinyl latex by tradename, but fails to state or suggest a preference for anionic vinyl latex materials. Consequently, this claim limitation is new matter.

In response, applicants have stated that the "known chemical structure of the compound would be obvious to one of ordinary skill in the chemical formulating art related to ink recording elements." However, applicants have not supplied the formula

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of this material and the formulation of tradenamed materials can be modified by the manufacturer. Therefore, in order to support their statements, it is requested that applicants provide evidence of the chemical structure that they are referring to and then amend the specification to incorporate the generic chemical structure into the specification so that this is available to one of ordinary skill in the art. At that time, the examiner will reconsider this rejection based upon evidence that the tradenamed material Morcryn 132 vinyl latex is in fact anionic, in combination with applicants' argument that one of ordinary skill in the art would have found it apparent from the disclosure of this single anionic material and the specific disclosure of anionic polyurethane materials, that the vinyl latex polymers of the invention should also be anionic.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 9, 11, 12, 15, 21, 22 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawano et al. (5,478,631) for reasons of record and for reasons given below.

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4. Claims 1-3, 7-15, 19-22 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawano et al. (5,478,631) for reasons of record and for reasons given below.

5. Claims 1, 2, 4-6 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawano et al. as applied to claims 1-3, 7-15 and 19-22 above, and further in view of Tomizawa et al. (6,224,971) for reasons of record and for reasons given below.

6. Claims 1 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawano et al. as applied to claims 1-3, 7-15, 19-22 above, and further in view of Ueda et al. (EP 791,475) for reasons of record and for reasons given below.

7. Claims 1, 2, 7, 8, 21, 22 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Niu et al. (6,599,593) for reasons of record and for reasons given below.

8. Claims 1, 2, 9-14, 19-22, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niu et al. (6,599,593) for reasons of record and for reasons given below.

9. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niu et al. (6,599,593) and further in view of applicants' admission of pages 8-9 of the specification for reasons of record and for reasons given below.

10. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niu et al. (6,599,593) as applied to claims 1, 2, 7-14, 19-22, 37 and 38 above, and further in view of Tomizawa et al. (6,224,971) for reasons of record and for reasons given below.

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11. Claims 1 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niu et al. (6,599,593) as applied to claims 1, 2, 7-14, 19-22, 37 and 38 above, and further in view of Ueda et al. (EP 791,475). As with the polyvinyl alcohol, the primary reference is also silent with respect to particular gelatin that may be used. Therefore, Ueda et al. is cited for teaching of gelatin that is used in the ink jet recording art (see page 3). The secondary reference teaches that gelatins may be pigskin, cow skin, or cow bone, and may be lime-processed, acid processed, or gelatin derivatives. Based upon this teaching it would have been obvious to one of ordinary skill in the art to use a gelatin previously taught for use in ink jet recording media as the gelatin of the primary reference.

12. Applicant's arguments filed March 2, 2005 have been fully considered but they are not persuasive. Applicants are continuing to rely on the language "laminate adhesion promoting overcoat layer" as if it lends specific structure to the medium above and beyond an overcoat layer that promotes adhesion at some point (i.e. at any point) in the laminate. Applicant has submitted an ASTM Figure 2 showing modes of laminate failure. These modes include failure wherever it occurs in the laminate. Failure between the substrate and the next closest layer is labeled as a type of laminate failure, i.e. "Debonding from the substrate." Applicants' attempts to distinguish between laminate adhesion and adhesion are not well founded. Each point in the figure labeled as a point where debonding can occur is a point of adhesion and a point of laminate adhesion. These terms are synonymous as used in this context.

Applicants argue that Kawano et al. is not directed to solving problems related to laminate adhesion. However, laminate adhesion is an aspect of all laminates. If the layers do not stay together, the medium is not useful. In addition, Kawano et al. does not have to be directed to applicants' problem in order to anticipate or obviate the claims. Applicants have not argued and do not argue that Kawano et al. does not disclose media that can meet all of the structural limitations of their claims. Arguing that the reference does not disclose "a laminate adhesion promoting overcoat layer," when this phrase has no special meaning in the art, is not persuasive. Kawano et al. does disclose an overcoat layer that may contain the same material as recited by applicants for their overcoat layer and that will necessarily promote adhesion, at least in its internal structure and where it adheres to the adjacent layer. These are both points of laminate adhesion and therefore the layer inherently discloses laminate adhesion. Applicants are directed to page 2 of their response where they quoted the MPEP 2163.07(a). If a device inherently performs a function or has a property, the patent specification necessarily discloses that function or advantage. Consequently, Kawano et al. necessarily discloses a laminate adhesion promoting layer.

Applicants argue that their invention "provides better laminate adhesion than the elements of the prior art." This argument recognizes that all of the elements of the prior art inherently disclose the property of laminate adhesion. They all have this property to some degree.

On page 5 of the response, applicants make many arguments that are unsupported by the record, i.e. that adhesion refers only to the adhesion between a

substrate and an adjacent layer, that an adhesion promoting overcoat layer improves adhesion of all the layers, and that terms laminate adhesion and adhesion necessarily are referring to different things. Additionally, contrary to applicants' position, the cited art does not indicate that the term adhesion is specific to the interaction between the substrate and the coated layer. It is only so limited when followed by the language "between the ink receptive layer and the substrate" as in the passage of Kawano et al. cited by applicants. If adhesion always referred to adhesion at this location, then the location of the adhesion would never have to be recited. Since the term adhesion is broad and refers to adhesion anywhere in the laminate, the references state the location they are referring to. Applicants have cited numerous passages all supporting the examiner's position on page 6 of the response.

Once again, Kawano et al. need not disclose better laminate adhesion to obviate the claims, nor does it have to mention laminate adhesion. And the examiner has not relied upon laminate adhesion as a motivation to modify the reference. Laminate adhesion is an inherent property of the laminate of the prior art and need not be mentioned by the reference for the reference to be applicable to applicants' claims. The structural limitations of applicants' claims are met by the reference disclosure.

Next, applicants attempt to rely upon their examples to overcome the reference. This is not relevant to the rejection under 35 USC 102. However, with respect to the obviousness rejection, the showings may be relevant. In order to prove that the comparative examples of the specification contained the same surfactants as the examples, applicants should submit lab notes from which the comparative examples

were based indicating that the surfactants were present at the time the experiments were conducted. The notes or accompanying declaration should indicate that the surfactants and quantities of surfactants were the same as in the examples. These notes have not been provided. Applicants' statements of how the specification could or should have been written on pages 7-9 of the response are unpersuasive. If applicants can and do provide support for amending the description of the comparative examples, then the comparative examples should be amended to accurately represent the modifications made in the comparative examples.

Even with these changes, the results of applicants' tests are not clear. Applicants have submitted numerous tables, but it is unclear how the polyvinyl alcohol was chosen for Comparative Example 5 and how closely related this polyvinyl alcohol is to the material of Example 1 and to polyvinyl alcohols typically used in this art. For example, applicants' specification sets forth average molecular weight and saponification degree for the preferred polyvinyl alcohol. In order to compare the materials of the examples and comparative examples, this information should also be provided for both the derivatized and non-derivatized polyvinyl alcohols and clearly pointed out to the examiner. If this information is submitted in a clear and concise manner, applicants' showings will be reconsidered with respect to the rejections under 35 USC 103 only.

Tomizawa et al. is relied upon for teaching the particulars of the acetoacetylated polyvinyl alcohol that were not particularly set forth by the primary reference. It is appropriate to look elsewhere in the art to identify a particular acetoactylated polyvinyl

alcohol because the particulars were not provided by the primary reference. Applicants response does not appear to address this issue, but rather addresses numerous other issues that are not relevant to the propriety of the combination rejection.

Similarly, Ueda et al. is relied upon to teach the particulars of gelatin since the primary reference does not provide the detail. Applicants have not addressed the combination as set forth but rather address the lack of motivation to modify the references to produce laminate adhesion. The examiner never set forth production of laminate adhesion as a motivation for combining the reference or as a result of the combination; laminate adhesion is an inherent property of the primary reference and no modification is required to meet this language of applicants' claims.

Niu et al. is also relied upon based upon the composition and structure set forth therein, rather than based upon a verbatim recitation of a "laminate adhesion promoting overcoat layer." As with Kawano et al., the structure of Niu et al. inherently includes a laminate adhesion promoting overcoat layer. Applicants have failed to set forth how their claims structurally or chemically distinguish over Niu et al. Applicants' arguments are the same as those with respect to Kawano et al. and are unpersuasive for the same reasons.

Applicants suggest that Niu et al. equates acetoacetylated polyvinyl alcohol to carboxycellulose which applicants allege gives inferior results. This is not the case. Niu et al. set forth acetoacetylated polyvinyl alcohol as a particularly preferred material over all others and providing excellent results. From the disclosure of the reference one

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of ordinary skill in the art would not have expected results using carboxycellulose to be equivalent. Acetoacetylated PVA is not one of a list of materials as applicants suggest.

As with Kawano et al., applicants' assertions with respect to the combination rejections are not persuasive for the reasons given with respect to Kawano et al. the prior art need not be directed to solving the problem as set forth by applicants as long as there is motivation to combine the references and form the structure that meets the claim limitations.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

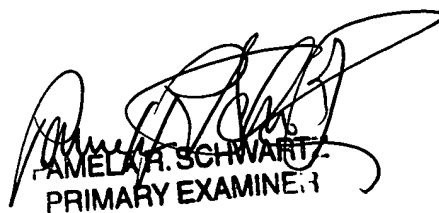
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz
May 10, 2005



PAMELA R. SCHWARTZ
PRIMARY EXAMINER